

## Missouri Department of Natural Resources

# **Total Maximum Daily Load Information Sheet**

## Lake Taneycomo

### Waterbody Segment at a Glance:

County: Taney
Nearby Cities: Branson
Area of impairment: 1730 acres

**Pollutant:** Low Dissolved Oxygen

**Source:** Table Rock Dam

TMDL Priority Ranking: Medium



#### **Description of the Problem**

### Beneficial uses of Lake Taneycomo

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life and Human Health associated with Fish Consumption
- Cold Water Fishery
- Whole Body Contact
- Boating and Canoeing
- Drinking Water Supply

#### Use that is impaired

- Protection of Warm Water Aquatic Life
- Cold Water Fishery

#### Standards that apply

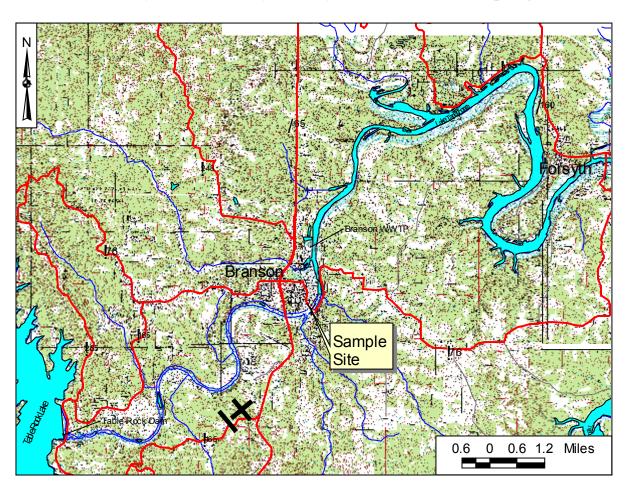
• The Missouri Water Quality Standard, found in 10 CSR 20-7.031 Table A, for dissolved oxygen in Cold Water Fisheries is 6.0 milligrams per liter (mg/L) or parts per million.

Deep water discharges from Table Rock Lake used to generate electrical power result in the discharge of water with low levels of dissolved oxygen (DO) into Lake Taneycomo during the summer and autumn, and the 6.0 mg/L standard for DO is rarely met. Liquid oxygen has been used to raise DO levels in the releases from Table Rock dam. In the last few years the operating authority at Table Rock dam has been relying less on liquid oxygen and more on turbine venting (drawing air into the generating turbines as water flows through them) to add oxygen to the water. This strategy has apparently resulted in worsened DO conditions in Lake Taneycomo. During the

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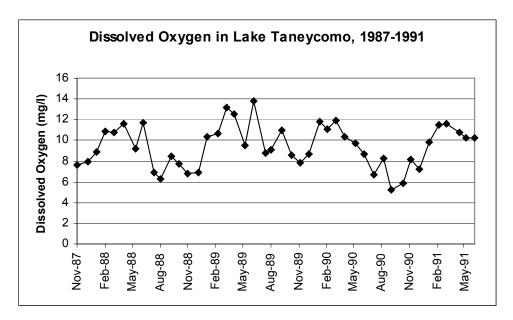
summer and fall monitoring period, the percent of time Lake Taneycomo water (at College of the Ozarks) met the 6 mg/l standard declined from 50 percent in 1990 to 10 percent in 2000. The 4 mg/L management target set by the Corps of Engineers was met about 90 percent of the time in 1990, but only about 50 percent of the time in 2000. The Missouri Department of Conservation is presently working with the Corps of Engineers to develop a water quality model for Lake Taneycomo that may help to determine how best to improve DO levels in the lake while retaining Table Rock Lake and Dam as an important source of electrical power.

### Lake Taneycomo in Taney County, Missouri, and Sampling Site

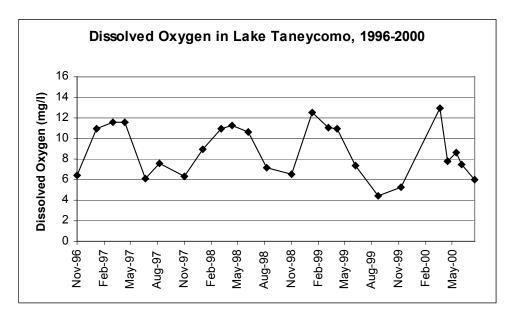


Direction of Flow

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Source: U.S. Geological Survey



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#### For more information call or write:

Missouri Department of Natural Resources Water Pollution Control Program P.O. Box 176, Jefferson City, MO 65102-0176 1-800-361-4827 or (573) 751-1300 office (573) 751-9396 fax

Program Home Page: <a href="www.dnr.state.mo.us/wpscd/wpcp/index">www.dnr.state.mo.us/wpscd/wpcp/index</a>

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